



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/595,451

02/19/2007

Stefan Portner

071308.0705

9931

31625 7590 01/18/2008
BAKER BOTTS L.L.P.
PATENT DEPARTMENT
98 SAN JACINTO BLVD., SUITE 1500
AUSTIN, TX 78701-4039

EXAMINER

GIMIE, MAHMOUD

ART UNIT

PAPER NUMBER

3747

MAIL DATE

DELIVERY MODE

01/18/2008

PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Office Action Summary

Application No.

10/595,451

Applicant(s)

PORTNER ET AL.

Examiner

Mahmoud Gimie

Art Unit

3747

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 19 February 2007.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-20 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-20 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 4/20/04 is/are: a) ☒ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☒ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☒ All b) ☐ Some * c) ☐ None of:
1. ☒ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 3/19/07; 2/4/07.
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

Drawings

1. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the high pressure accumulator embodied in the form of a ring must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

Claim Rejections - 35 USC § 102

2. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

3. Claims 1-20 are rejected under 35 U.S.C. 102(b) as being anticipated by Djordjevic (US 6,345,609).

Djordjevic discloses a high pressure radial piston pump (18) for common rail injection systems comprising: a pump housing (34), - a drive shaft (38) - at least one pump piston (44), which can move in a radial direction in relation to the drive shaft and - a high pressure accumulator (22) integrated into the high pressure radial piston pump (18), wherein the high pressure accumulator (22) is embodied in the form of a ring; figure 1.

Regarding claim 2, wherein the high pressure accumulator (22) is arranged concentric in relation to the drive shaft (38).

Regarding claim 3, wherein the high pressure accumulator (22) is formed by a ring groove realized in the pump housing at the front side and sealed with a cover.

Regarding claim 4, wherein at least one metallic sealing surface is formed on the pump housing and/or on the cover (74) in order to seal the high pressure accumulator (22); see figures 3 and 4.

Regarding claim 5, wherein characterized in that the cover (74) is connected to the pump housing (34) at least by means of one central screw (40) arranged concentric in relation to the ring groove.

Regarding claim 6, wherein characterized in that the high pressure accumulator (22) is embodied as a ring groove which is realized in the outer circumference of a rotationally symmetrical pump insert

Regarding claim 7, wherein the outer circumference of the pump insert operates together with a corresponding inner circumference surface of the pump housing.

Regarding claim 8, wherein the pump insert (74) is embodied in cylindrical form.

Regarding claim 9, comprising there is at least one high pressure connection (24) embodied on the high pressure accumulator (22) in order to supply at least one injector (26) of an internal combustion engine.

Regarding claim 10, wherein the high pressure accumulator (22) is effectively connected with a pressure control valve (52, 54) integrated into the high pressure radial piston pump or arranged on the high pressure radial piston pump.

Regarding claim 11, Djordjevic discloses a high pressure radial piston pump (18) for common rail injection systems comprising: - a pump housing (34), a drive shaft (38), at least one pump piston (44), which can move in a radial direction in relation to the drive shaft and - a ring shaped high pressure accumulator (22) integrated into the high pressure radial piston pump.

Regarding claim 12, wherein the ring shaped high pressure accumulator (22) is arranged concentric in relation to the drive shaft (34).

Regarding claim 13, wherein the ring shaped high pressure accumulator is formed by a ring groove realized in the pump housing (34) at the front side and sealed with a cover (74).

Regarding claim 14, wherein at least one metallic sealing surface is formed on the pump housing and/or on the cover (74) in order to seal the ring shaped high pressure accumulator.

Regarding claim 15, wherein the cover is connected to the pump housing at least by means of one central screw arranged concentric in relation to the ring groove.

Regarding claim 16, wherein the ring shaped high pressure accumulator (22) is embodied as a ring groove which is realized in the outer circumference of a rotationally symmetrical pump insert.

Regarding claim 17, wherein the outer circumference of the pump insert operates together with a corresponding inner circumference surface of the pump housing.

Regarding claim 18, wherein the pump insert is embodied in cylindrical form.

Regarding claim 19, comprising at least one high pressure connection embodied on the ring shaped high pressure accumulator in order to supply at least one injector of an internal combustion engine.

Regarding claim 20, wherein the ring shaped high pressure accumulator (22) is effectively connected with a pressure control valve (52, 54) integrated into the high pressure radial piston pump (18) or arranged on the high pressure radial piston pump.

Conclusion

4. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. The cited references disclose high pressure radial piston pumps.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Mahmoud Gimie whose telephone number is 571-272-4841. The examiner can normally be reached on Monday-Friday between 7 a.m. -3:30 p.m.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Stephen K. Cronin can be reached on 571-272-4536. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

MG


MAHMOUD GIMIE
PRIMARY EXAMINER